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It was suggested that the child, surrounded by a sea of words, sequentially and selectively acquires the nouns, verbs, and phrases of his language as well as gestures, intonations and dialects of those with whom he interacts. The rate and breadth of this acquisition is influenced by the nature of his verbal interactions with those charged with his care. As this process unfolds, certain preverbal experiences are transformed by labeling and categorizing. Thus language is a socially-conditioned relationship between the child's internal and external worlds, and once words have become mediators, the child can effectively change his own social and material reality. The classroom teacher should create a variety of learning contexts built around experiences of significance to the children of socially and culturally deprived background.

Major concern is with the hypothesized shift from the child's use of words for labeling specific and often single referents, to his use of words for signifying categories of objects, actions or attributes. The major discussion question initially posed was: If such a shift occurs, does it vary from one social context to another and what are the consequences of such variation?

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THE SOCIAL CONTEXT OF LANGUAGE ACQUISITION[1]

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[1] An earlier version of this paper was presented at the Arden House Conference on Pre-School Enrichment of Socially Disadvantaged Children, December 17, 1962, Arden House, Harriman, New York.

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THE SOCIAL CONTEXT OF LANGUAGE ACQUISITION

Children predictably acquire language. Considering that most human actions are accompanied by or brought about by language, this is not a surprising fact. Perhaps, because language is so pervasive in human behavior, the process of language acquisition is taken for granted.

A comprehensive treatment of the process of language acquisition is beyond the scope of this paper. Above all, current knowledge does not justify such an attempt. This paper, prepared for a conference on pre-school enrichment,[1] will focus upon the social conditions of learning that affect language acquisition, and more specifically, upon a hypothesized shift from the child's use of words for labeling specific and often single referents, to his use of words for signifying categories of objects, actions or attributes. If the shift indeed occurs, does it vary from one social context to another, and, what are the consequences of such variation?

The need to modify the cognitive growth patterns of young children--particularly of those children who live in the slum areas of our major cities--has added new impetus to an old search for a clarification of the relationship between language and thought. It is our intention to examine aspects of label acquisition as related

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[1] The Arden House Conference was specifically devoted to the exploration of theoretically-based early enrichment programs for city children living in poverty.

to language growth as well as cognitive development.

The literature on the developmental treatment of language, structured largely in terms of maturational theory and based on the congruent findings of careful investigators, specifies an approximate sequence and timetable of children's verbal development. The focus of many of these studies has been on the rate of language acquisition, the unit of study being the number of different words elicited from the young child in a standard setting. The social environment is viewed as a hampering or enhancing medium in which the unfolding of speech occurs. But the basic process of growth is considered to be determined by the neurophysiological structures mediating language.

These studies have given us some facts about the growth of overt speech behavior. But they have failed to deal with language development in the context of modern psychological theory. Similarities in the quantitative features of overt behavior (such as the size of spoken vocabulary) are taken by the normatively oriented researcher as behaviors functionally equivalent for quite different groups of children. Predictions based upon such studies are trivial. No insight can be gained into the dynamic relationship between social environment and man's most significant learned behavior, language, from studies limited to word-counting. As yet, psychologists are reluctant to examine language as meaningfully related to the social, emotional or even intellectual realities of childhood. This failure seems strange to the writer in light of

the plethora of clinical investigations of development, often described functionally as sequential adaptations to the environment.

While most of these investigators are aware that the content of speech is culturally determined--a product of human interaction--their investigations of language have been closely tailored to the pediatrician's measurement of growth. Just as height is recorded by the pediatrician, so is language seen as a unidimensional behavior to be charted and recorded by the language investigator. Hunt characterized this tradition:

> The normative approach has been considered reasonable, for if development is predetermined, measurement of the anatomy and of behavior at successive ages could be considered explanations as well as measurement (1961, p. 4).

Within this maturational framework, counting the number of words emitted during a testing session and/or discerning the mean sentence length in a child's discourse has become the model for assessing what children learn of language. As an effort to discover regularity in the midst of complexity, these approaches to measurement have, of course, served an important purpose.

The role of the social environment in language acquisition, then, is examined by grouping children according to fathers' occupation or education, and recording systematic variations in verbal indices concomitant with the classification. Findings of these investigations are well-known. For instance, children from high-income, high-status families speak in longer sentences, are more articulate, and rely upon a more varied vocabulary in their

speech than do their lower-class peers (Templin, 1957). This is a descriptive approach to a dynamic problem. The manner in which these differences have come about as a function of environmental conditions needs to be understood rather than merely described and accepted.

Because of the limitations of most current approaches, some researchers are seeking meaningful theoretical formulations relating language growth to its antecedent conditions. Some (Bernstein, 1960 and Vigotsky, 1962) have presented significant alternatives to the normative-descriptive approach. Faced with the increasing need to effectively direct language growth, theoretical models relating verbal and conceptual development are of particular importance. The scientifically-based pre-school program is a powerful tool of new research and also a testing ground for available knowledge. In the context of such programs, we may want to ask:

a. what are some of the salient conditions affecting the pre-verbal stages of language acquisition,

b. what is the role of verbal interaction in the acquisition of labels, and,

c. what is the relationship between verbal proficiency and verbal mediation.

A complete discussion of the social conditions of language acquisition should, indeed, begin with a focus upon the earliest of vocal responses in the newborn, instead of an examination of the learning of labels. Developmentally, the child's attending

to tone as a clue to the speaker's mood, or his phonetic drift, precede the acquisition of labels. There are findings illustrating the effects of the social environment on vocalization with children as young as six months.[1] The decision to discuss the social context of language acquisition by focusing upon the shift from labeling to categorizing is prompted by the writer's experience with empirical research at this stage of language acquisition.

I. Labels and categories

The study of language as a communicative process gains increasing popularity with the clinically oriented researcher. At the same time, the learning theorist has emphasized the importance of verbal responses in mediating human problem-solving behavior. The unity of these two separately treated aspects of language--communication and cognition--is posited as fundamental to this treatment of early language acquisition. In this attempt at developing a theoretical approach to language as functional behavior, the conditions under which language as communication is acquired are considered determinants of the child's intrapersonal (mediational)

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[1] A by now classic study of Brodbeck and Irwin (1946) has shown that children raised in their homes or foster homes vocalize more than children living in hospital or institutional settings when assessed as early as six months of life. Rheingold and Bayley (1959) have found that eight experimental children who had a single mother surrogate excelled in the areas of vocalization as contrasted with the controls who had multiple mother surrogates.

use of language. While the child uses his slowly developing communicative skills to inform those who care for him about his needs, he is organizing his perceptual and social world through language.

The specific hypothesis put forth in this paper and illustrated with some data on young children relates to label acquisition. It is suggested that some labels can be acquired in a stable learning context simply by the frequency with which they co-occur with their referents. But a more active process of verbal interaction is hypothesized as a prerequisite for the acquisition of words signifying categories. To become an effective tool in the child's adaptation to his social world, language must be used by children communicatively and cognitively. In this framework, the process of verbal mediation is regarded as closely intertwined with the learning of labels, which is the earlier phase of language acquisition.[1]

In the behavioral theorist's model of verbal behavior (Osgood, 1953), words are thought of as abbreviated motor behavior, or fractional implicit responses. These verbal mediators are used as an adaptive short-cut in a chain of responses instrumental in reaching a goal. As mediators, words replacing the more cumbersome

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[1]Briefly, the process of verbal mediation is often described as a reliance upon words as a short-cut in reaching a solution to a problem for which the child has no habitual response. In using words overtly and covertly in the midst of the problem-solving process, the child replaces the cumbersome method of motor trial and error with verbal mediation.

overt process are then substitutes for motor, large-muscle action.

This analysis of language behavior (developed with great elegance) offers a poor point of departure for the study of language acquisition. While motor learning requires the most generic of human contacts, language cannot be acquired in an interpersonal vacuum; it can only be learned from another. The conditions of language acquisition are social, by definition, in this presentation. For the child who has acquired a repertoire of language responses, words indeed can take the place of motor activity, and become detached from the social conditions under which they were learned. This transformation of language during development is of great importance to the educator. As yet, we can speak only in the greatest of generalities about this feature of cognitive socialization. In summarizing Vigotsky's formulations concerning language and thought, Bruner writes:

> . . . it is the internalization of external dialogue that brings the powerful tool of language upon the stream of thought (Vigotsky, 1962).

Implicit in the quote is an emphasis on the conditions surrounding the acquisition of communicative language as a determinant of verbal mediation.

There is as yet little empirical evidence testing directly the relationship between these various functional aspects of language acquisition to one another. However, it is our contention that the fragmentary evidence which is available tends to substantiate —

such a position.

In summarizing a large body of findings related to the development of verbal skills, McCarthy (1961) postulated a gradient of verbal proficiency as a function of the amount and kind of contact the child experiences with his mother. In expanding this statement, it can be asserted that verbal proficiency is related to the amount and quality of children's verbal interaction with adults. This applies particularly to those children who can be characterized as abundantly stimulated.[1]

Does the development of effective verbal mediation also depend upon some aspects of the availability of adults, who serve as language models, participating in an ongoing dialogue with the child? The evidence currently available suggests that some children who can be described as proficient in <u>overt</u> verbal skills, also rely upon <u>covert</u> language--or verbal mediational processes--when approaching complex problems. The parallel development of increasing verbal skill and a more frequent use of verbal mediation in Luria's studies of speech-delayed twins (1961) is one example of this process.

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[1]Since McCarthy's summary in 1961, additional findings have been reported. The impact of verbal stimulation upon infants (Bing, 1963), has been shown to have long-range consequences for verbal proficiency.

Some of the birth-order studies are also of interest. Helen Koch (1954) first reported a large-scale study showing the superiority of first-born six-year-olds in verbal skills over second-born. This superiority has been explained in terms of parental availability. Schachter (1963) in his studies of first-born adults, reports an increasingly higher percentage of first-borns at higher levels of education than later-borns. One interpretation of this finding may relate the academic success of the first-born to his verbal proficiency.

During the last two years a number of studies have been published on the teaching of reliance upon verbal mediators to subjects in experimental settings. Jensen (1963a) taught educationally retarded adolescents to produce task-relevant verbalizations. For instance, he taught them to construct a sentence out of two meaningful words in a paired-associate task. A control group not given such assistance took five times longer learning this task. Children from educationally retarded backgrounds have been shown to be particularly poor in verbal and conceptual tasks. Thus it may be that children deficient in verbal stimulation in early childhood will later exhibit a pattern of deficiencies in overt verbal skills and will less frequently rely upon verbal mediation. In short, the child deprived of language experiences in early childhood is deprived of a useful cognitive tool later.

In an effort to understand more clearly the triple relationships posited above--early verbal stimulation, the development of verbal proficiency, and the development of verbal mediation--the author proposes to more closely examine certain aspects of label acquisition in a social context.

A. <u>The acquisition of labels</u>

At an elementary stage of language acquisition the child is thought of as perceiving the word as one of a multitude of attributes of an object (shape, weight, color, name). By the repeated association of seeing and touching the object, plus the presence of another person who is saying the name of the object, the child acquires the bond

between word and referent. However, the name usually appears embedded in a sentence--the verbal context--and the object is surrounded by a sea of other labels grammatically and descriptively attesting to the complexity of label acquisition. This is a process that starts before the child reaches his first birthday.

In an attempt at analyzing the acquisition of words, many have relied upon the conditioning paradigm. This model presents certain difficulties in its emphasis upon the one-to-one relationship between stimulus and response. The learning of labels subsumes considerable "noise" at the stimulus side and a process of successive approximations at the response side. The child must simultaneously attend to various features of word and referent. He needs to identify stable features in the acoustic, or sound, properties of the word--who is naming and variations in accent and intonation; he needs to rely upon the relative stability in the objects' physical characteristics--the child's blanket is probably an example of a highly stable object. And central to the acquisition of the label is the systematic re-occurence or pairing of word and object.

A favorable learning environment would have the child's attention focused on the salient features of the pairing of label and referent, or in terms of behavioral theory, conditions favoring "the acquired distinctiveness of cues." The learning of new verbal responses, particularly in the case of young children, is facilitated

by a relative invariance in the environment[1] where the social context of learning as well as the stability of the bond between word and referent is being acquired.[2] Discriminating the pairing of object and label from a large array of vocal utterances in the midst of a constant flux is crucial at this stage of learning.

Although some of the principles involved in the acquisition of labels appear simple, most related questions remain unanswered. The effective isolation of a series of salient features of both word and referent may be preceded by other kinds of learning of the "linguistic mode." It has been reported, for instance, that the infant responds to general features of vocal behavior (intonation, emotional quality) long before he gives evidence of successfully pairing objects and labels. It is possible that the linguistically naive infant responds more quickly to the intonational character of language because of the pervasiveness of these qualities always present when language is spoken. In contrast, labeling requires selective attending--the inhibition of irrelevant features.

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[1]One of the crucial characteristics of the home, a natural setting for language acquisition, is its intrinsic variability. This is particularly true of the lower-class home which was the setting for the studies to be reported. These homes have been described as: more crowded, lacking in scheduling or predictability for children, and more transient in its inhabitants than middle-class homes.

[2]Novel but simple learning is well understood by advertisers. The highly predictable association between the picture of the Coca Cola bottle with its name from the TV soundtrack is a fact of great utility in label acquisition.

In spite of the difficulty of the postulated process of label acquisition, the overriding empirical fact is: children acquire words in the midst of the tremendous "noise" of the natural environment. And some accomplish this faster than others. All children are surrounded by a wealth of opportunities for hearing the names of objects, seeing or touching them concurrently. The abundance of learning opportunities are great enough so that most two-year-olds understand and effectively use a number of labels. However even two years after the beginning of label acquisition, children's knowledge of words differ along class lines. But a short period of pre-school enrichment has been shown (Staff Progress Report, 1963) to lessen the gap between children of different social classes by producing a statistically significant increase in labeling performance.

The systematic observation of children in the natural setting of their homes poses, obviously, great methodological difficulties. In comparing the knowledge of children raised in varying social environments qualitatively--what classes of words do they know--instead of measuring only their relative rate of label acquisition, some clues to the dynamics of label acquisition may be gained.

B. Receptive Labeling in Four-Year-Olds

In an earlier paper (John, 1963), the author has stated that young lower-class and middle-class children are least likely to differ in verbal tasks requiring a non-verbal response. (Such tasks

are receptive vocabulary tasks; currently, the most widely-used of these is the Peabody Picture Vocabulary Test.) In this paper, an additional differentiation is made; namely, pointing behavior, — in response to discrete classes of word-referent relationships, reveals patterns of language acquisition characteristic of varying social conditions of learning. The comparison chosen for illustration focuses upon words standing for specific objects as contrasted with words whose referents denote action.[1]

In studying patterns of performance among lower-class Negro children, Pasamanick and Knobloch (1962) compared their performance to that of the standardization population (characterized by greater ethnic and social class heterogeneity) on a widely used test. A similar though small-scale attempt is being made here.[2] In other on-going studies, data have been accumulated on large numbers of "slum" children, who are of school-age. In this analysis of label-acquisition interest was focused in examining the labeling performance of four-year-olds.

The Peabody Picture Vocabulary Test is a receptive task requiring the child to display his comprehension of labels by

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[1]Some observers have claimed that at the very beginning of language acquisition nouns predominate in the toddler's vocabulary.

[2]The research and teaching staff of the Institute for Developmental Studies is engaged in a variety of projects involving lower-class Negro children. Currently, pre-school enrichment classes are being held in 8 Manhattan elementary schools. The Peabody Picture Vocabulary Test protocols of approximately forty experimental and control children--before entering enrichment--was selected for this illustration.

pointing to the correct picture-referent when confronted with four drawings. Of the 35 words in the beginning section of the test attempted by the four-year-old children being chosen for enrichment, we were interested in identifying clusters of items failed.[1] Although the words are progressively more difficult on the PPVT, instead of a linear increase in the percentage of children failing each successive item, three clusters of words were found to be particularly hard for these children: action words, words related to rural living, and words whose referents may be rare in low-income homes.[2]

That words like caboose and kangaroo were not recognized by these children is not surprising; Chicago investigations (Eells, 1951) have shown similar trends (e.g., older lower-class children failing an item such as "harp"). However, even though there were relatively few children tested, why was there such a high percentage of words failed that denoted action? If there are abundant opportunities to hear simple labels in the environment, verbs and gerunds are likely to be heard by lower-class children--who have been characterized as "motoric" in their style--as much as by middle-

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[1]The items of Form B of the PPVT failed by more than one-third of these children are the following:

Rural: leaf, bee, bush, nest
Experientially rare: kangaroo, accident, caboose
Action words in the form of gerunds: digging, tying, pouring, building, picking.

[2]The first of the action words appeared as item 13 on the PPVT.

class children. Explanation may lie in the learning environment. Children raised in low-income homes have relatively little opportunity to engage in active dialogue when learning labels. If the lower-class child has to rely upon the frequency of co-occurrence of label and referent to a greater extent than the middle-class child, then the invariance between word and referent must also be greater.

But the learning of verbs and gerunds by frequency of occurrence instead of active dialogue presents greater difficulties than the learning of labels for specific objects. The gerund "tying" for example, was missed by more children in our population than those who passed. The children were not deficient in experience with the referent; the difficulty was fitting the label to the varying forms of action observed and experienced. This fitting process, selecting the specific connection between word and referent occurs more easily where there is a variety of kinds of verbal interaction with adults. Ester Milner (1951) has described the paucity of verbal interaction of children with adults in the low contrasted with the high-income Negro home. The middle-class child learns by feedback, by being heard, corrected and modified--by gaining "operant control" over his social environment as he uses words that he hears. He learns as an adult teacher plays a more active role in simplifying the

various features of word-referent relationships.[1]

By examining young children's performance on a receptive labeling task, we have argued here that distinctions concerning classes or categories of labels (specific nouns vs. verbs) assumed to have been learned to varying levels of proficiency under different conditions of social interaction can be specified.[2] If the theoretical statements presented in the paper thus far have validity beyond the particular task used for the analysis, labeling elicited verbally as well as by the identification of pictures would reveal similar trends. Overt labeling was elicited from lower-class children by a task specifically designed for our studies (Verbal Identification Test). When the children were asked in this test to enumerate what they saw on the drawings depicting actions, they specified: who the agents were, what objects were used during the actions, etc. In this part of the test, children from different SES did not differ statistically. In the second part of the test in

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[1] In controversy over the education of the socially disadvantaged child, many sweeping generalizations concerning class and race differences in language stimulation and language-acquisition have been made. In this analysis, we have attempted to highlight some of the antecedent conditions to the oft-described verbal deficit in culturally disadvantaged children. The extent of this deficit and its social and educational implications are not the topic of this paper. Suffice it to say that the author is convinced that the manner in which many middle-class parents tend to stimulate their children is the end-result of their own educational and work-experiences.

[2] The PPVT only calls for the child to point to the picture asked for. Though this test did not differentiate significantly among first grade children drawn from three socio-economic groups, the test does correlate significantly in a larger group of Negro and white children also drawn from three socio-economic groups.

which a single best-fit response was asked for, significant class differences emerged.[1]

In the enumeration part, children focused upon specific referents, and their performance is thought of as analogous to that of the noun items of the PPVT. But when they were asked to pull together what they saw by means of a "title", the action itself had to be specified. For many lower-class children this proved to be a particularly difficult task.

Thus it seems that the findings reported as obtained on a small group of four-year-olds seem logically related to the verbal performance of older children (first and fifth-grade lower-class children) as well.

This hypothesis, then, of a differential level of difficulty of the acquisition of labels depending upon the stability of relations between word and referent needs to be tested extensively by direct experimentation.

C. The acquisition of categories

A developmental shift from labels to categories implies a dichotomy that appears forced[2] at closer scrutiny, but in our

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[1] In half of the pictures, the response would be a verb or a phrase including a verb.

[2] In Brown's analysis of speech, a name is a category and a category is defined by auditory and contextual attributes. In addition, a name is an attribute of a referent category since instances of the referent category have the property of evoking the name (1958).

analysis of language acquisition, this distinction has been found empirically useful. We recognize that very young children convey their familiarity with the multiplicity of instances of a label by their non-verbal behavior[1] and in the language of the adult, few labels stand for a single referent.

The focus now is whether children from different social classes vary in their knowledge of words. We have already stated that children differ in their exposure to single as contrasted with multiple instances of referents, and that children engaged in verbal dialogue with adults have an advantage while learning to speak.[2] Data already given illustrated that lower-class children have greater difficulty in acquiring those words which occur in a variety of shifting contexts. The specific context in which a label has first been acquired, i.e., frequent re-occurrence of label and referent, or a context characterized by low "noise" is limiting and restrictive. The difficulty in generalizing a word from one setting to another is in the discovery of what are irrelevant variations accompanying the essential constancy. In Brown's words: "For the player of the

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[1] Long before they have learned how to pronounce the word "horse" while looking at its picture in a book, some two-year-olds will run and point to their rocking-horse or another picture of a horse.

[2] Many adults assume the role of a good language tutor. When responding to the young child's inarticulate attempts at communicative speech, they expedite the acquisition of overt speech by using a special intonation and pointed gestures to teach the child a new word--lending salience to the correct pairing of object and referent.

Original Word Game, a speech invariance is a signal to form some hypothesis (italics mine) about the corresponding invariance of referent," (1958). It is in the midst of verbal dialogue with experienced speakers that children form hypotheses about word-meaning categories as well as test them.

This process of discovering invariance common to multiple instances of a label is fundamental for the conceptual as well as the verbal development of the young child. Little is known, however, about the mechanics of this process beyond the recognition that both generalizations and discriminations have to be made by the child learning multiple meanings to words. Because of the lack of empirical data illustrating category formation in young children, an examination analogous to the construction of word-meaning categories was undertaken by examining[1] the way children representing varying social-class backgrounds group pictures of discrete referents into piles. What explanations do these varying groups of children give in why they grouped pictures into a particular pile? A few examples of verbalizations of lower-class and middle-class first-grade Negro children are given. (The concept was represented by pictures of four

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[1]One method of examination was by means of a Concept Sorting task. This test, designed by the author and co-workers at the Institute, consists of 16 simple drawings which can be grouped into functional pairs (sailor and boat, for instance) or into logically consistent piles of four cards each (e.g., means of transportation, animals). After the child has finished sorting the cards into piles, the examiner elicits a verbal rationale about each sort from the child.

men at work: a policeman, doctor, farmer, and sailor.)

Lower-class first-graders	Middle-class first-graders
a. "because doctor nurses these other people"	a. "because they all men."
b. "because the man and big Bill (policeman) like each other"	b. "all the same, all of them are men."
c. "because they look the same"	c. "They are both people."

These are comments of the children after grouping at least two of the working men in a pile. They are samples of verbalizations selected from protocols obtained by this task--a task developed for a study which attempted to gather information concerning the verbal skills, intellectual performance and motivational approaches of white and Negro first and fifth-grade children in New York City. Two hypotheses advanced in that study are relevant here. First, verbally less experienced children were expected to sort stimulus cards into a larger number of piles of fewer cards each. Second, after completing the sort and asked to give a verbal rationale, middle-class children (as a group considered verbally more experienced) might be expected to offer an explicit statement of a concept such as "they are all animals," in contrast with lower-class children whose statement of a verbal rationale reflects in some way, the specific aspect of communality used in their grouping. In other words, the children furnish the experimenter with the actual attribute or the common context used in their generalization. An example for an implicit statement of a sort was: "they all have legs." These

hypotheses were partially substantiated and the results have been published (John, 1963).

The examples quoted illustrate the general trend in responses on this task. Young middle-class Negro children tend to produce category labels ("men") more often than their lower-class peers. Instead of overtly or covertly relying upon a category label in their sorting, the poorer children often focused on a non-essential attribute.

Thus, while sorting, children have to discover some invariance in two or more cards. The shift from reliance on labels as signifying single referents to signifying categories of objects, actions, and attributes is a complex of overt and covert activities on the part of young children. By developing skills in discovering what are crucial and invariant features of objects which have a common name, children gain practice in solving both verbal and non-verbal problems.

II. Words as mediators

The utility of language as related to the solution of complex problems lies in the subject's ability to invoke these responses as covert or overt mediation.

In an article on pre-school learning Jensen (1963b) asks:

> How do these verbal mediating responses become linked to physical stimuli in the first place? Note that the words verbal mediating responses are used here rather

> than verbal responses. The distinction is important, for even a parrot can develop verbal responses to stimuli. We are here interested in verbal behavior which facilitates further learning, which controls behavior, and which permits the development of conceptual thinking (p. 136).

Jensen also stressed the importance of the mechanics of word acquisition. Words presented to very young children in a variety of verbal contexts are thought of as of greater mediating use to the child than if appearing in a more restricted context. (He cites experimental findings from Russian laboratories to substantiate this position.) A congruent set of statements is presented in this paper.

It was argued here that labels appearing in a <u>variety of learning contexts</u> become categories in the linguistic repertoire of children. Others have contended that labels are of use as mediating verbal responses only after having occurred in a <u>variety of verbal contexts</u>. Between the acquisition of word-meaning categories and the acquisition of words as mediators, parallel conditions of learning become discernible. In stressing the importance of variety in stimulation this analysis bears some resemblance to that of Hebb as well as other developmental theorists concerned with cognitive processes. However, we have attempted to specify further what the demands are facing the child as he learns. When confronted with several objects bearing a common label the child has to identify -

common critical and invariant features. Similarly, by invoking a mediating response the child identifies the common, critical features of two or more non-verbal tasks. In both of these learning situations the child is actively searching for invariance among features of his environment separated in space and time. The tools used by him in this search have been sharpened in his verbal dialogue with others.

In summary, the child surrounded by a sea of words, sequentially and selectively acquires the nouns, verbs, and phrases of his language as well as the gestures, intonations and dialect of those with whom he interacts. The rate and breadth of this acquisition is influenced by the nature of his verbal interactions with those charged with his care. One of the most crucial features in the acquisition of language is the process of internalization. As this process enfolds, certain pre-verbal experiences are transformed by labeling and categorizing.

Language, then, is a socially-conditioned relationship between the child's internal and external worlds, and once words have become mediators the child can effectively change his own social and material reality.

III. A note on enrichment

Can educational implications for pre-school programs be drawn from a theoretical statement on language acquisition? Though some of the ideas presented in this paper could easily be utilized by the early childhood educator, primarily, this treatment of verbal

behavior is presented as a model of label acquisition. Ideas developed within the context of a simplified and abstract treatment of language may have to undergo substantial modification in order to be applied in the classroom. However, certain general points related to enrichment can be made based upon the above discussion.

The crucial importance of actively stimulating language growth in the classroom is recognized by teachers of the socially disadvantaged. The feeling of urgency they bring to the task of increasing the verbal repertoire of the children in these programs sometimes results in a stress on quantitative growth only. This emphasis on vocabulary expansion is not surprising in light of the maturational approach to language.

If the communicative and cognitive functions are significantly related at the beginning of language acquisition, it becomes important to discover ways for these aspects of language to be maintained interrelatedly in enrichment programs. A mechanical approach to vocabulary building will not produce the desired end of developing useful verbal skills. Sylvia Ashton-Warner vividly described her way of teaching reading to young Maori children in which she utilized their deeply personal experiences as basic content while imparting the mechanics of letters. Similarly, the teacher in the enrichment classroom can discover the interests and concerns of

her children by being sensitive to their products.[1]

This paper has repeatedly stressed the acquisition of highly developed linguistic patterns as being crucial to young children. Because language is at once, a highly personal and an objectively necessary tool, the educator must be wary lest children learn to resent the acquisition of verbal skills. The teaching of words must be carried out with originality, flexibility, and restraint.

In becoming aware of some of the features underlying label acquisition, the classroom teacher can create a variety of learning contexts built around experiences of significance to the children. Similarly, the teacher who is aware of the importance of verbal dialogue in the shift from labeling to categorizing, can direct learning not only by her own interactions, but, also, by helping children in the classroom to be effective speakers as well as active listeners.

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[1] In a summer enrichment program combining interaction and research, the author and her teacher-colleagues worked with kindergarten children. Each child was asked to re-tell, in front of the tape-recorder, a standard story. In studying the modifications of the story made by each child, much was learned about sequential language as well as the themes of particular interest to young children raised in low-income areas. These children also told a made-up story to the recording teacher, and in these fantasy products events of concern, pressing feelings, were often displayed. Though some of the children spoke with poor articulation, others could not think up their "own" story, many children in this group displayed forcefulness in their style, and communicative strength in their descriptions.

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